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1 cavity". The side tunnel is an elongated passageway that acts as an inviting burrow to an  
2 evading rodent (see attached Dictionary definitions). When the rodent enters the side tunnel,  
3 it has not entered the outer housing. Simpson does not disclose the use of a side tunnel and  
4 does not recite a doorway on the tunnel. Therefore Simpson does not anticipate Applicant's  
5 invention.

6 The Applicant submits that Simpson discloses a rock simulating outer cover 24 with  
7 two, substantially vertically oriented doorways 32 formed on the opposite outside surfaces of  
8 the outer cover. Each doorway 32 includes a removable panel 36 that slide into channels 34  
9 formed on the edges of the doorways 32. The panels are used to either close the doorways 32  
10 or to limit their size.

11 4. Rejection of Claims 4, 12, 15, and 17 under 35 USC 103 (a):

12 The Examiner considered Claims 4, 12, 15 and 17 obvious based on Simpson. As  
13 noted above, Claims 15 and 17 have been cancelled and the rejection of these Claims is  
14 considered moot. In view of the amendments to Claim 1, any arguments that Claims 1, 4 and  
15 12 would be considered obvious are traversed and reconsideration is now requested for the  
16 following reasons:

17 (a) No Suggestion to Combine or Modify Simpson to Meet Applicant's Invention:

18 For the reasons stated above, Applicant's invention is novel. The key features found  
19 with Applicant's invention is the use of at least one side tunnel formed on the outer housing  
20 and the pest opening formed in the side tunnel that provides access to the inner cavity.  
21 Another feature not found and suggested by Simpson is the means to pivotally attach the  
22 outer cover to the bottom member.

23 In order to support a finding for obviousness, some reason, suggestion or motivation

1 must be found from Simpson as a whole for a person of ordinary skill to have modified  
2 Simpson to meet the invention recited in Claim 1. Simpson's trap is simulated rock with two  
3 visible relatively large holes, called doorways 32, formed on its sides. When an individual  
4 views the trap when standing adjacent to it or from a distance, the doorways 32 and panels 36  
5 are visible which destroys the realism of the rock. A second set of vertical panels 42 are  
6 attached to the bottom plate 38 which, according to the inventor, block the view of the  
7 interior from the doorway 32 and restrict the size of the animal that can enter the enclosure.  
8 (See Col. 3, lines 7). Because the panels 42 are located inside the enclosure, they do not  
9 block the view of the doorways 32 when standing adjacent to the trap or from a distance.

10 The Applicant submits that the use of doorways or side tunnels are mutually  
11 exclusive. No disclosure or suggestion is made in Simpson of hiding or concealing the  
12 doorways 32 because the visible impact of the doorways 32 on the overall structure had not  
13 been considered. Also, no reasons exist for adding side tunnels to Simpson's housing except  
14 to meet Applicant's invention.

15 (b) The Combined Use a Side Tunnel with a Pest Opening Provides Unexpected  
16 Results:

17 The combined use of a side tunnel with a pest opening formed therein has been shown  
18 to be especially useful in preventing specific animals (crustaceans) from entering the trap.  
19 Large Soldier crabs, Hermit crabs, and Fiddler crabs (and possibly other crustaceans) walk  
20 sideways. Unfortunately, they are attracted to the bait blocks commonly used in pest stations.  
21 When pest traps with doorways that directly enter the trap are used, crabs can easily enter the  
22 trap and consume substantially large amounts of bait blocks. When such pest trap include  
23 interior barriers, such as vertical panels 42 disclosed in Simpson, the crabs become trapped

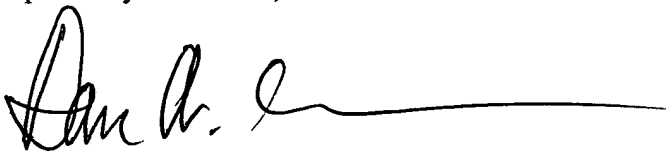
1 inside the trap and block any other animals from entering the trap.

2 While hungry crabs may be a nuisance, most resort, hotel and restaurant operations  
3 don't use traps to exterminate them. Instead, they institute crab-feeding programs.  
4 Unfortunately, these programs are relatively expensive for the operators.

5 Applicant's invention is especially well suited for exterminating rats in hotels and  
6 resorts in areas with crabs because crabs cannot enter the side tunnel. As a result, crabs  
7 cannot access the trap opening where they become stuck and block entry to the desired pests.  
8 Obviously, if they can't enter the tray they also cannot consume the bait. In support of the  
9 above facts are two enclosed Rule 132 Declarations from Dr. Austin M. Frishman, of Boca  
10 Raton, Florida, a Specialist in Structural Pest Control, and Mr. James Egelhoff, Operations  
11 Manager of BVI Pest Control of the British Virgin Islands.

12 For all of the above reasons, the claims 1-14, should be considered patentable and  
13 Notice of Allowance should be granted.

14  
15 Respectfully submitted,

16   
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18 DEAN A. CRAINE

19 Reg. No. 33,591  
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**VERSION WITH MARKINGS**  
**TO SHOW CHANGES MADE**  
**TO SPECIFICATION**  
**FOR FIRST OFFICE ACTION**

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**TITLE: ROCK SIMULATING PEST TRAP**

This is a utility patent application based on a provisional patent application (Serial No. 60/241,244) filed on October 18, 2000.

**BACKGROUND OF THE INVENTION**

1. Field of the Invention:

This invention pertains to pest traps, and, in particular, to pest traps designed to be used in outdoor, visible areas.

2. Description of the Related Art:

Most home and business owners would prefer to place pest traps, when needed, outside their residence or business. Because deadly diseases and filthy conditions are often associated with insects and rodents, the placement of traps inside residences and businesses where they may be in plain view of guests or visitors is undesirable.

In order to use a pest trap outdoors, a protective outer housing is used which houses

1 the poisoned bait or body-piercing trap. Such traps are disclosed in U.S. Patent Nos.  
2 4,541,198, 4,550,525, 4,611,426, 4,730,412, 5,040,327, 5,448,852, and 6,082,042.

3 One drawback of such traps is that the outer housings are relatively large structures  
4 that are visible at a distance. Because of the negative connotation associated with insect and  
5 rodent traps, most homeowners find the visibility of such traps objectionable. Although the  
6 traps may be placed behind other objects or covered with dirt to hide them, this is undesirable  
7 because it prevents the trapper from easily checking or retrieving the traps.

8 What is needed is a tamper-resistant, inconspicuous, outdoor pest trap that is  
9 effectively disguised as a large object typically found in a garden, such as a rock.

## 11 SUMMARY OF THE INVENTION

12 It is an object of the present invention to provide a pest trap designed for outdoor use.

13 It is another object of the present invention to provide such a pest trap that is tamper-  
14 resistant by isolating the poisoned bait or animal trap inside an outer housing to prevent  
15 unintentional targets, such as children, pets, and other small animals, from contacting the bait  
16 or trap.

17 It is a further object of the present invention to provide a pest trap that is disguised as  
18 a large rock, so that it may be placed anywhere in a yard or garden so that customers or  
19 neighbors are not privy to the fact that a pest problem may exist.

20 These and other objects of the invention which will become apparent are met by a  
21 tamper-resistant pest trap that has an outer housing that simulates a rock typically found in  
22 the garden or landscape areas around a residence or building. The outer housing is a hollow

1 structure with a large cavity formed therein in which a holding tray may be placed. Formed  
2 on the sides of the outer housing are small pest openings that enable insects or small rodents  
3 to enter the large cavity during use. In the preferred embodiment, two first and second side  
4 tunnels are formed on the sides of the outer housing which bend and terminate inside the  
5 outer housing to form a hidden pest opening thereby preventing visibility of the pest openings  
6 when standing adjacent to the outer housing. The outer housing has a flat bottom ~~surface~~  
7 member so that the pest trap may be set up on the soil. In one embodiment, a large opening is  
8 formed in the bottom surface which communicates with the large cavity formed in the outer  
9 housing so that the holding tray may be selectively inserted into the large cavity. During  
10 assembly, suitable bait or a trap is placed into the holding tray before the tray is inserted into  
11 the large opening and secured in position inside the outer housing. When pests enter the  
12 outer housing and ingest the poison or activate the trap, they are killed inside the outer  
13 housing. In another embodiment, the outer housing comprises a lid member pivotally  
14 attached along one edge of a flat bottom member with the holding tray affixed to the top  
15 surface of the bottom member.

16 In both embodiments, an optional stake and hold-down chain may be provided which  
17 are used to secure the outer housing on the ground to prevent its movement.

### 19 BRIEF DESCRIPTION OF THE DRAWINGS

20 Fig. 1 is a perspective view of the pest trap disclosed herein, appearing to be a real  
21 rock placed in a yard.

22 Fig. 2 is a front elevational view of the invention.



1        Fig. 3 is a rear elevational view of the invention.  
2        Fig. 4 is a right side elevation view of the invention.  
3        Fig. 5 is a left side elevation view of the invention.  
4        Fig. 6 is a bottom plan view of the invention.  
5        Fig. 7 is a perspective view of the bait/trap holding tray that may enclose bait or a  
6 spring-loaded trap.  
7        Fig. 8 is a side elevational view of the invention being held in place by the optional  
8 stake and chain.  
9        Fig. 9 is a front elevational view of a second embodiment of the invention comprising  
10 a pivoting lid member attached to a bottom member.  
11        Fig. 10 is a side elevational view of the second embodiment shown in Fig. 9 showing  
12 the lid member revised to allow the user access to the cavity.  
13        Fig. 11 is a perspective view of the second embodiment of the invention in which the  
14 pest opening comprises a plurality of small openings for insects.  
15

#### 16                    **DESCRIPTION OF THE PREFERRED EMBODIMENT(S)**

17        Referring to Fig. 1-11, there is shown and described a pest trap 10 designed to  
18 simulate a rock in a garden or landscape area 95. The pest trap 10 includes a hollow outer  
19 housing 11 with a large cavity 45 formed therein. Formed on the outer housing 11 are side  
20 tunnels 12, 14 that lead to the large cavity 45. Pest openings 13, 15 are formed on the sides  
21 of the outer housing 11 adjacent to the terminating inside surface of the side tunnels 12, 14  
22 through which a rodent 30 or insects 31 may enter and/or exit the outer housing 11.

1 As shown in Fig. 6, the bottom surface 16 of the outer housing 11 is flat so that the  
2 outer housing 11 may be positioned on flat soil. Formed centrally on the bottom surface  
3 member 16 is an opening 17 which provides the user access to the cavity 45. During  
4 assembly a holding tray 20 is inserted into the opening 17 and extending into the large cavity  
5 45. An attachment means is provided for selectively attaching the holding tray 20 inside the  
6 opening 17.

7 In the preferred embodiment, the outer housing 11 is made of 1/8 inch cross-linked  
8 polyurethane and is gray in color with black flakes to simulate a "one" to "three man" size  
9 granite rock. The outer housing 11 measures approximately 15 inches in length, 11 inches in  
10 width, and 6 inches in height, and weighs approximately 2 lbs. In the preferred embodiment,  
11 the two side tunnels 12, 14 are approximately 2-1/2 inches in width and height and three to  
12 six inches in length. The interior surfaces of the side tunnels 12, 14 are ragged so that the  
13 side tunnels 12, 14 appear as natural crevices or openings in a large rock. Each side tunnel  
14 12, 14 is slightly curved so that the openings 13, 15 are invisible when the pest trap 10 is  
15 viewed from the side.

16 As mentioned above, the pest openings 13, 15 are designed to allow a rodent 30 such  
17 as a mouse or rat, to enter and exit the outer housing 11. In a second embodiment, shown in  
18 Fig. 11, the pest openings comprise a plurality of small openings 48 designed to allow insects  
19 31, such as ants or termites, to enter the outer housing 11. Larger insects or animals are  
20 unable to enter the outer housing 11.

21 The holding tray 20 is designed to completely close off the opening 17. In the  
22 preferred embodiment, the holding tray 20 is rectangular with a flat bottom surface with four

1 side walls 22 that extend upward therefrom. A longitudinally aligned rearward section 21A  
2 is formed on one end and a tab 24 is formed on the opposite end of the bottom surface 21.  
3 Formed inside the holding tray 20 is an open cavity 37 in which suitable poison 55 or trap 60  
4 may be placed

5 In the preferred embodiment, attachment means are used to securely attach the  
6 holding tray 20 over the opening 17. In the referred embodiment, the attachment means  
7 includes is a slot 19 formed on one side of the opening 17 which receives the tab 24 on the  
8 holding tray 20. During assembly, the holding tray 20 is placed into the opening so that the  
9 tab 24 engages the slot 19. A suitable connector 23 is used to selectively affix the rearward  
10 extending section 21A of the bottom surface 21 of the holding tray 20 to the bottom surface  
11 16 of the outer housing 11.

12 In another embodiment shown in Figs 9 and 10, the outer housing (denoted 11')  
13 comprises a lid member 80 pivotally attached along one edge to a flat bottom member 90.  
14 The lid member 80 has an outer surface with suitable color and texture to simulate a large  
15 rock. Like outer housing 11, tunnels 82, 84 are formed on the outer housing 11' which bend  
16 and extend interiorly and terminate at two opposite side openings 86, 88 so that a pest may  
17 enter the cavity 89 formed inside the outer housing 11' when the lid member 80 is closed  
18 over the bottom member 90. The holding tray (denoted as 20') is fixed to the bottom  
19 member 90 so that the user gains access to the poison 55 or trap 60 by opening the lid  
20 member 80. An optional latch 92 and pin 94 may be attached to the lid member 80 and  
21 bottom member 90 to lock them together during use.

22 As stated above, a suitable poison 55 or trap 60 is placed inside the open cavity 37,

1 37' on the holding tray 20, 20', respectively. Once the poison 55 or trap 60 is positioned and  
2 reset inside the holding tray 20, 20', the holding tray 20, 20' is then disposed inside the cavity  
3 45, 89 and the lid member 80 is closed over the bottom member 90 so that a pest which  
4 enters the cavity 89 has access to the poison 55 or trap 60.

5 When the desired pests are insects 31, the small side opening 13, 15 can be replaced  
6 with a plurality of small insect-size openings 48, formed at the end surfaces of the two  
7 tunnels 12, 14, as shown in Fig. 11. An insecticide may be used in place of a rodenticide or  
8 trap.

9 The outer housing 11 may be held in place on the ground 40 by an optional stake 26  
10 that tautly tethers the outer housing 11 to the ground 40 with one or two short chains 27, 28,  
11 as shown in Fig. 8. Bolts 32 and nuts 34 are inserted through holes 33, 35, respectively,  
12 formed on the bottom surface 16 of the outer housing 11. In the preferred embodiment, the  
13 stake 26 is a round rod approximately  $\frac{1}{4}$  inch in diameter and 16 inches in length which  
14 maybe easily driven into the ground. The chains 27, 28 are approximately 8 inches in length.

15 During use, pests are attracted to the smell of the poison 55 or bait 61 located in the  
16 holding tray 20, 20'. The pest enters either one of the two side openings 13, 15, or 48 through  
17 the tunnels 12, 14, or 84, respectively. Once the pest enters the outer housing 11, 11' it has  
18 access to the poison 55 or bait 61 in the holding tray 20, 20'. The pest eats the poison 55 or  
19 eats the bait 61 causing activation of the trap 60 and dies relatively quickly inside the outer  
20 housing 11, 11'. The operator of the pest trap 10 then removes the holding tray 20, 20' to  
21 gain access to the cavity 45, 89 to remove the dead pest from the outer housing 11, 11', add  
22 more poison 55 or bait 61 or re-set the trap 60 in the holding tray 20, 20'.

1           In compliance with the statute, the invention described herein has been described in  
2 language more or less specific as to structural features. It should be understood, however,  
3 that the invention is not limited to the specific features shown, since the means and  
4 construction shown, comprised only of the preferred embodiments for putting the invention  
5 into effect. The invention is therefore claimed in any of its forms or modifications within the  
6 legitimate and valid scope of the amended claims, appropriately interpreted in accordance  
7 with the doctrine of equivalents.

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**VERSION WITH MARKINGS**

**TO SHOW CHANGES**

**MADE TO CLAIMS**

**FOR FIRST OFFICE ACTION**

**RECEIVED**  
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**GROUP 3600**



## CLAIMS

### I claim:

1. (Twice Amended) A pest trap, comprising:

a. a hollow, outer housing with a flat bottom [surface] member, said outer housing including an upper lid member that has [having] an outer shape and color to simulate a rock[,] and a lower bottom member, said outer housing having an inner cavity and a partially concealed first side tunnel to provide access to said inner cavity;

b. at least one pest opening formed on said first side tunnel to access said inner cavity;

c. a holding tray disposed inside said inner cavity; [and,]

d. a pest terminating means located inside said holding tray[.]; and,

e. means to pivotally attach said lid member to said bottom member.

2. The pest trap as recited in Claim 1, further including an opening formed on said bottom surface to enable said holding tray to be placed inside said inner cavity.

3. The pest trap as recited in Claim 2, including means to attach said holding tray over said opening formed on said bottom surface.

4. (Once Amended) The pest trap as recited in Claim 1, wherein said at least one pest opening on said first side tunnel is at least one inch in diameter.

1           5.       (cancelled)

2

3           6.       The pest trap as recited in Claim 1, wherein said pest terminating means is a  
4 chemical rodenticide.

5

6           7. (Once Amended) The pest trap as recited in Claim 1, further including a [ground  
7 holding] means [used to hold] for holding said outer housing to the ground.

8

9           8. (Once Amended) The pest trap as recited in Claim 7, wherein said [ground  
10 holding] means for holding said outer housing to the ground is a ground-piercing stake.

11

12           9.       The pest trap as recited in Claim 1, wherein said outer housing has an outer  
13 appearance that simulates a granite rock.

14

15           10. (Once Amended) The pest trap as recited in Claim 1, further including a [second]  
16 partially concealed second side tunnel formed on said outer housing opposite said first  
17 [concealed] side tunnel.

18

19           11.       The pest trap as recited in Claim 10, further including a pest opening formed  
20 on said second side tunnel enabling a pest to enter said inner cavity.

21

22           12.       The pest trap as recited in Claim 11, wherein said pest opening on said second



1 side tunnel is approximately one inch in diameter.

2

3 13. (cancelled)

4

5 14. (cancelled)

6

7 15. (cancelled)

8

9 16. (Once Amended) The pest trap as recited in Claim [12] 1, wherein said pest  
10 terminating means is a spring-loaded trap.

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12 17. (cancelled)

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14 18. (cancelled)

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16 19. (cancelled)

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18 20. (cancelled)

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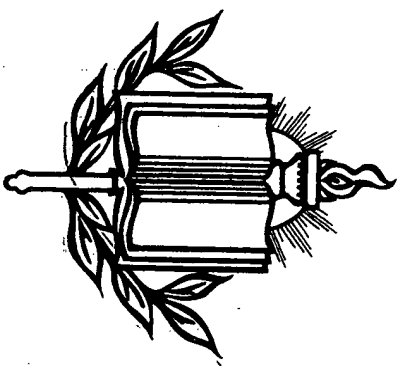
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# Encyclopedic Unabridged Dictionary of the English Language



*The dictionary entries are based on the First Edition of The Random House Dictionary of the English Language*

**GRAMERCY BOOKS**  
NEW YORK/AVENEL, NEW JERSEY



stic/acid hydrex/ide, tung/stic anhydride.  
derivative; 'equiv., equivalent; imit., imitative;  
poetical. See the full key inside the front cover.

holding through a tube.

BRITISH PRONUNCIATION KEY: æ, act, Æble, dære, Æri; ebb, Æ - e as in alone, e as in system, i as in easily, o as in go



du; 1f, lee; hot, beer. Order, oil, book, dose, out; up, O  
 pu, u as in circus; ° as in button (but°en), five (fiv°), cr



1. Chief; *stng*: shoe; *thín*, *thát*; *th* as in *measure*.  
(krá-d'v). See the full key inside the front cover.  
2. Chief; *stng*: shoe; *thín*, *thát*; *th* as in *measure*.  
(krá-d'v). See the full key inside the front cover.  
3. Chief; *stng*: shoe; *thín*, *thát*; *th* as in *measure*.  
(krá-d'v). See the full key inside the front cover.  
4. Chief; *stng*: shoe; *thín*, *thát*; *th* as in *measure*.  
(krá-d'v). See the full key inside the front cover.  
5. Chief; *stng*: shoe; *thín*, *thát*; *th* as in *measure*.  
(krá-d'v). See the full key inside the front cover.